

**DRAFT  
ENVIRONMENTAL ASSESSMENT  
GALATA  
AQUATIC INVASIVE SPECIES  
INSPECTION and DECONTAMINATION  
STATION**



Tiber Reservoir

**March 2017**



***Montana Fish,  
Wildlife & Parks***

**Galata Aquatic Invasive Species  
Inspection and Decontamination Station  
Draft Environmental Assessment  
MEPA, NEPA CHECKLIST**

**PART I. PROPOSED ACTION DESCRIPTION**

**1. Type of proposed state action:**

Montana Fish, Wildlife & Parks (FWP) proposes to lease approximately 1 acre of private land at the intersection of Highway 2 and Galata Road north of Tiber Reservoir/Lake Elwell to establish a seasonal aquatic invasive species (AIS) inspection and decontamination station. Proposed developments include expansion of an existing gravel access road with two approaches; a gravel inspection pad; decontamination unit; access to a well; water delivery system to the decontamination unit; portable latrine; canopy shelter; and a storage shipping container. The landowner would prepare the site prior to FWP leasing the site. For the purposes of this report, Tiber Reservoir/Lake Elwell will be referred to as Tiber Reservoir and the Galata AIS Inspection and Decontamination Station will be referred to as the Galata AIS Inspection Station.

**2. Agency authority for the Proposed Action:**

ARM 12.8.602 requires the Department to consider the wishes of the public, the capacity of the site for development, environmental impacts, long-range maintenance, protection of natural features and impacts on tourism as these elements relate to development or improvement to fishing access sites or state parks. This document will illuminate the facets of the Proposed Action in relation to this rule.

**3. Name of project:**

Proposed Galata Aquatic Invasive Species Inspection and Decontamination Station

**4. Project sponsor:**

Montana Fish, Wildlife and Parks  
1420 East 6<sup>th</sup> Avenue  
Helena, MT 59601  
(406) 444-2535

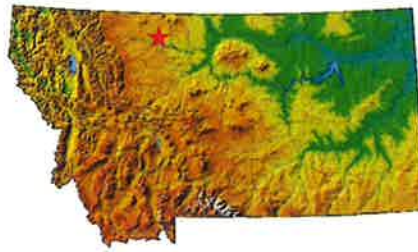
**5. Anticipated Schedule:**

Estimated Public Comment Period: April 2017  
Estimated Decision Notice: April 2017  
Commission Approval Requested to Proceed: April 2017  
Estimated Start Date: April 2017  
Estimated Completion Date: May 2017  
Current Status of Project Design (% complete): 65%

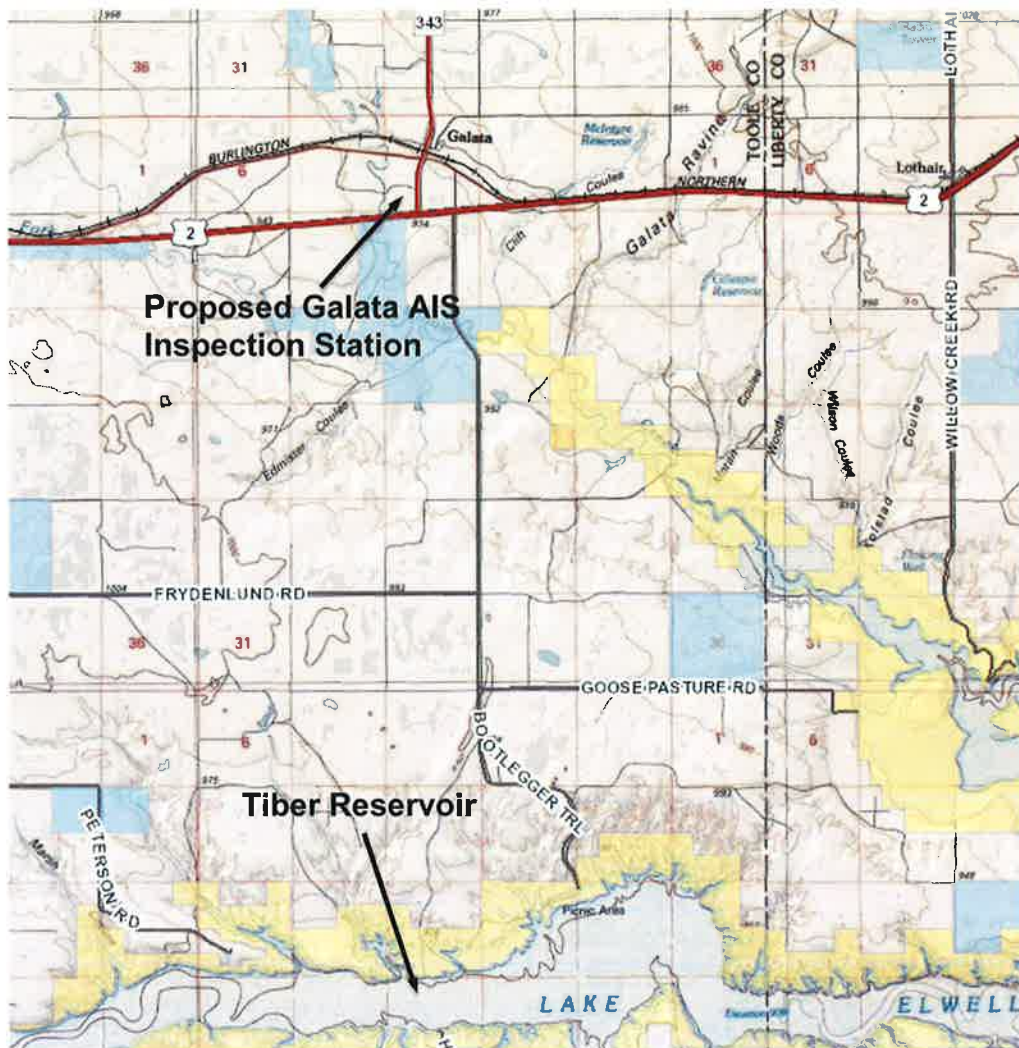
**6. Location:**

The proposed Galata AIS Inspection Station is located on private land at the intersection of Highway 2 and Galata Road in Galata, Montana about 8 miles north of Tiber Reservoir, in Toole County, Section 9 Township 31 North, Range 3 East (Figures 1 and 2).

**Figure 1. General Location of Galata AIS Inspection Station**



**Figure 2. Area Location of Galata AIS Inspection Station**



**Figure 3. Galata AIS Inspection Station Parcel Map, Aerial View**



**7. Project size -- estimate the number of acres that would be directly affected that are currently:**

	<u>Acres</u>		<u>Acres</u>
(a) Developed:		(d) Floodplain	<u>0</u>
Residential	<u>0</u>	(e) Productive:	
Industrial	<u>2</u>	Irrigated cropland	<u>0</u>
(b) Open Space/	<u>0</u>	Dry cropland	<u>0</u>
Woodlands/Recreation		Forestry	<u>0</u>
(c) Wetlands/Riparian	<u>0</u>	Rangeland	<u>0</u>
Areas		Other	<u>0</u>

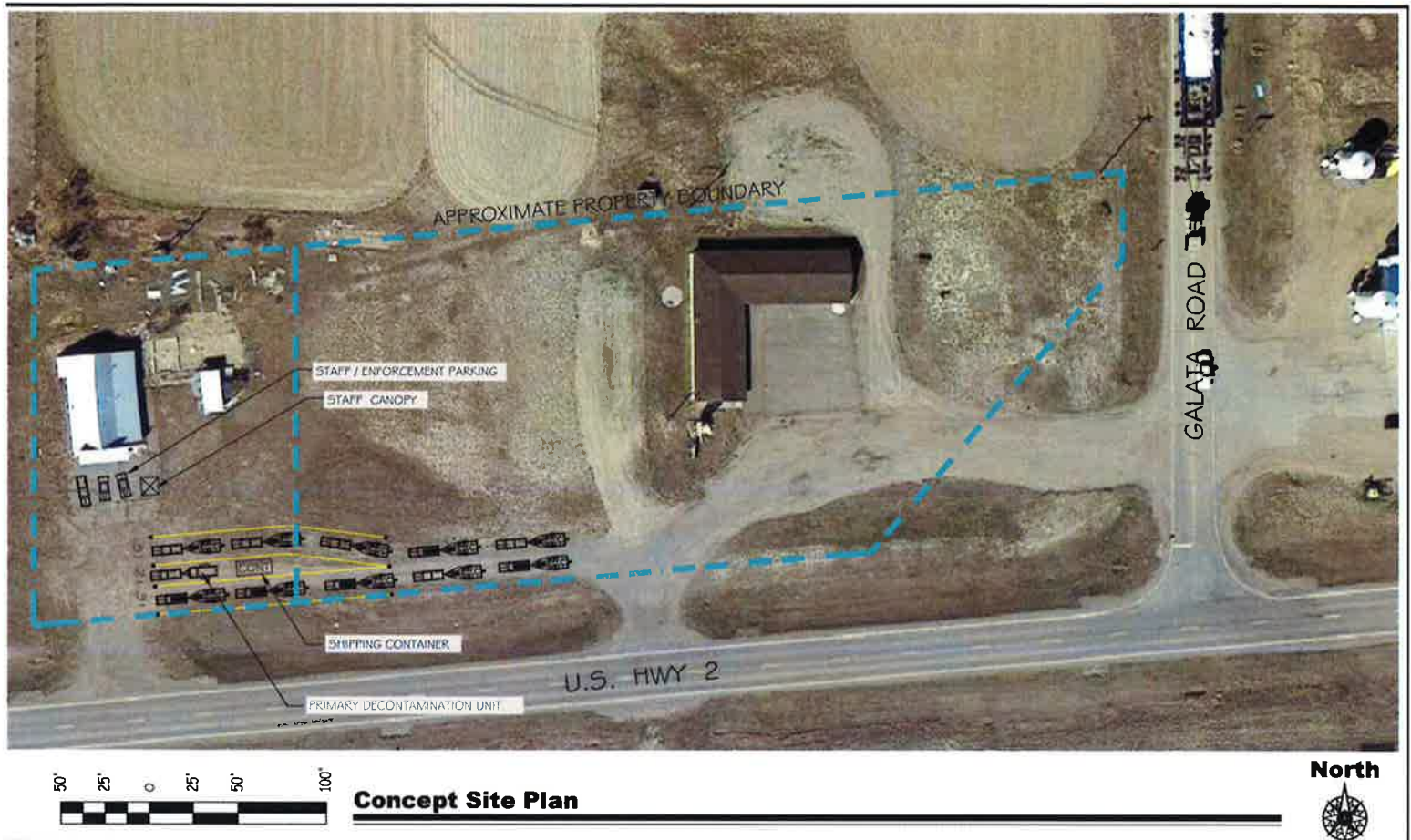
**Photo 1. View of the proposed Galata AIS Inspection Station site**



**Photo 2. View of the western portion of the Galata AIS Inspection Station**



**Figure 4. Galata AIS Inspection Station Preliminary Concept Site Plan**



**8. Permits, Funding & Overlapping Jurisdiction.**

**(a) Permits:** Permits would be filed at least 2 weeks prior to project start.

<u>Agency Name</u>	<u>Permits</u>
No permits needed	

**(b) Funding:**

<u>Agency Name</u>	<u>2017 Funding Amount</u>
FWP General License Fund	\$25,000

**(c) Other Overlapping or Additional Jurisdictional Responsibilities:**

<u>Agency Name</u>	<u>Type of Responsibility</u>
Natural Heritage Program	Species of Concern ( <i>Appendix A</i> )
State Historic Preservation Office	Cultural Clearance ( <i>Appendix B</i> )
Toole County Weed District	Weed Management Coordination

**9. Narrative summary of the proposed action:**

Invasive zebra and quagga mussels have caused tens of millions of dollars in damages in the Great Lakes region and, more recently, in the southwestern U.S. They likely arrived in the ballast water of ocean-going ships and appeared in the Great Lakes in the 1980s. They've since spread to at least 30 states. The primary vector for transporting invasive mussels is water hauled by boats and associated equipment. All boaters and anglers are urged take year-round precautions and to Clean, Drain and Dry their equipment after each use.

In the absence of their natural predators, invasive mussels rapidly cause significant problems by altering natural systems that support fisheries. High numbers of invasive mussels filter out zooplankton and phytoplankton that larval fish rely upon, thereby disrupting the aquatic food chain. Invasive mussels also cause millions of dollars in damage to boats, motors, and associated gear, thereby impacting water-based recreation. Invasive mussels can also clog water pipes and hydropower facilities, jam municipal water supply lines, and choke off agricultural irrigation systems. Once established, there are no known methods for controlling mussel populations in lakes or rivers.

Invasive mussel larvae were detected for the first time in Montana in October 2016 in Tiber Reservoir and "suspect" detections turned up in Canyon Ferry Reservoir, the Missouri River below Toston Dam, and the Milk River.

The discovery triggered a natural resource emergency in Montana and led to several recommended strategies to manage the threat of invasive mussels spreading to other areas both within the state and neighboring states and provinces. In January 2017, Montana's Mussel Response Implementation Team leaders presented a series of recommendations to the Montana Legislature to address prevention, detection and containment efforts, including the creation of an AIS management bureau within FWP.

Recommendations include additional mandatory watercraft inspection stations; deployment of watercraft decontamination stations at Tiber and Canyon Ferry reservoirs; and doubling sample collection to more than 1,500 samples to be taken from more than 200 water bodies.

The specific rule amendments outline several new regulations, including:

1. Mandatory inspections of out-of-state motorized or non-motorized watercraft prior to launching on any Montana water body.
2. Mandatory inspections of motorized or non-motorized watercraft traveling across the Continental Divide into the Columbia River Basin within Montana.
3. Mandatory inspections of all motorized or non-motorized watercraft coming off Tiber and Canyon Ferry reservoirs, and decontamination if necessary.
4. Drain plugs would be required to be removed during overland transport, if the watercraft doesn't have drain plugs, reasonable measures must be taken to dry or drain all compartments, including bilges.
5. Transporting lake and river water would be prohibited.
6. Live bait and fish would be required to be transported in clean domestic water where allowed in current fishing regulations. Upon leaving Tiber and Canyon Ferry Reservoirs, bait and fish must be transported without water.

Emergency response vehicles and equipment engaged in emergency activities would be exempt from the rule amendments.

In order to comply with the proposed rules and to control the spread of zebra and quagga mussels in Montana, FWP proposes to lease approximately one acre of private land at the intersection of Galata Road and Highway 2 eight miles in Galata, Montana, north of Tiber Reservoir to establish a seasonal aquatic invasive species inspection and decontamination station. Proposed developments include expansion of an existing gravel access road, a gravel inspection pad; a decontamination unit; access to a well; water delivery system to the decontamination unit; portable latrine; canopy shelter, and a storage shipping container. The landowner would complete site preparation prior to FWP leasing the site. The proposed inspection station is located between commercial structures on previously disturbed land.

The property would be managed under existing FWP public use regulations. Management of the site would include routine maintenance, control of vehicles and firearms, and other accepted FWP management policies. Protection of the natural resources, the health and safety of visitors, and consideration of neighboring properties would all be considered and incorporated into management for this site. The property would be managed for use as an inspection station only and no overnight public camping, hunting, or ATV use would be allowed on the site. Overnight use could include FWP state housing in an RV using utility hookups from a previous manufactured home installation.

Further information about the ecology, habitat, range, means of introduction, and control of zebra and quagga mussels and other aquatic invasive species can be found in *Appendix E- Aquatic Invasive Species in Montana* and at:

<https://nas.er.usgs.gov/queries/FactSheet.aspx?speciesID=5>

[https://en.wikipedia.org/wiki/Zebra\\_mussel](https://en.wikipedia.org/wiki/Zebra_mussel)

## **10. Description and analysis of reasonable alternatives:**

### **Alternative A: No Action.**

If no action was taken and the proposed AIS inspection and decontamination station was not developed, invasive mussels could become further established in Tiber Reservoir and could spread to other water bodies in Montana. If this were to occur, significant damage to native aquatic habitats and fisheries, recreation and tourism, outdoor recreation equipment, agricultural irrigation systems, hydropower facilities, and municipal water supplies could occur.

### **Alternative B: Proposed Action.**

FWP proposes to lease approximately 1 acre of private land at the intersection of Highway 2 and Galata Road north of Tiber Reservoir at Galata, Montana to establish a seasonal aquatic invasive species (AIS) inspection and decontamination station. Proposed developments include expansion of an existing gravel access road, a gravel inspection pad; decontamination unit; access to a well; water delivery system to the decontamination unit; portable latrine; canopy shelter, and a storage shipping container. The landowner would complete site preparation prior to FWP leasing the site.

## PART II. ENVIRONMENTAL REVIEW CHECKLIST

Evaluation of the impacts of the Proposed Action including secondary and cumulative impacts on the Physical and Human Environment.

### A. PHYSICAL ENVIRONMENT

1. <u>LAND RESOURCES</u>  Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Soil instability or changes in geologic substructure?		X				1a.
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility?			X		Yes	1b.
c. Destruction, covering or modification of any unique geologic or physical features?		X				1c.
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		X				1d.
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X				

- 1a. The Proposed Action would not affect existing soil patterns, structures, productivity, fertility, erosion, compaction, or instability. Soil and geologic substructure would remain stable during and after the proposed work.
- 1b. During construction, some minor modifications to the existing soil features would be required for construction of the gravel access road and gravel inspection pads. Disturbed areas would be seeded with a native seed mix to minimize erosion and the spread of noxious weeds. The property is located on previously disturbed land, is adjacent to commercial facilities, and is not in agricultural production. The Proposed Action would not affect soil productivity or fertility. FWP Best Management Practices (BMP) would be followed during all phases of site improvement to minimize erosion (*Appendix C*).
- 1c. No unique geologic or physical features would be altered by the Proposed Action.
- 1d. The proposed Galata AIS Inspection Station is located over eight miles from Tiber Reservoir and approximately one-third mile from Willow Creek. Therefore, the Proposed Action would have no impact on Tiber Reservoir or Willow Creek.

2. <u>AIR</u>  Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Emission of air pollutants or deterioration of ambient air quality? (Also see 13 (c).)			X		Yes	2a.
b. Creation of objectionable odors?		X				2b.
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				
e. For P-R/D-J projects, will the project result in any discharge, which will conflict with federal or state air quality regulations? (Also see 2a.)		X				2e.

- 2a. Dust may be temporarily generated during improvement of the access road and inspection pad. If additional materials were needed off-site, loading at the source site would generate minor amounts of dust. FWP would follow FWP BMP during all phases of site improvement to minimize risks and reduce dust. See *Appendix C* for the BMP. Diesel equipment would be used to implement the Proposed Action. There would be a temporary increase in diesel exhaust. If the Proposed Action were implemented, odors from diesel exhaust would dissipate rapidly. The impacts would be short term and minor.
- 2b. FWP would regularly maintain the latrine to minimize objectionable odors.
- 2e. The proposed project would have no impact on air quality in the vicinity of the Galata AIS Inspection Station and would not result in any discharge that could conflict with federal or state air quality regulations.

3. <b><u>WATER</u></b>  Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?		X				3a.
b. Changes in drainage patterns or the rate and amount of surface runoff?		X				3b.
c. Alteration of the course or magnitude of floodwater or other flows?		X				
d. Changes in the amount of surface water in any water body or creation of a new water body?		X				
e. Exposure of people or property to water related hazards such as flooding?		X				
f. Changes in the quality of groundwater?		X				
g. Changes in the quantity of groundwater?		X				
h. Increase in risk of contamination of surface or groundwater?			X		Yes	3h.
i. Effects on any existing water right or reservation?		X				
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		X				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		X				
l. For P-R/D-J, will the project affect a designated floodplain? (Also see 3c.)		X				3l.
m. For P-R/D-J, will the project result in any discharge that will affect federal or state water quality regulations? (Also see 3a.)		X				3m.

- 3a. Because the proposed Galata Ais Inspection Station is over eight miles from Tiber Reservoir and one third mile from Willow Creek, the closest water body, the proposed developments would have no impact on any surface water.
- 3b. Construction of the gravel access road and gravel inspection pads would have minimal impact on drainage patterns or surface runoff of the site and would have no impact on surface water.
- 3h. The use of heavy equipment during construction may result in a slight risk of contamination of groundwater but would have no impact on surface water. FWP BMP's would be followed during all phases of site improvement to minimize these risks (*Appendix C*).
- 3l. According to the Toole County FEMA Floodplain Mapping, a flood map has not been prepared for Toole County. However, since the proposed project site is not located near

water, it is unlikely that the site is located within a floodplain.

3m. There would be no impacts to water quality resulting from site improvement.

4. <b>VEGETATION</b>  Will the proposed action result in?	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?		X				4a.
b. Alteration of a plant community?		X				4b.
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				4c.
d. Reduction in acreage or productivity of any agricultural land?		X				4d.
e. Establishment or spread of noxious weeds?			X		Yes	4e.
f. For P-R/D-J, will the project affect wetlands, or prime and unique farmland?		X				4f.
g. Other:						

4a. Since the proposed Galata AIS Inspection Station site was previously disturbed with neighboring commercial developments, the Proposed Action would have no impact on the plant communities and diversity of the site. All disturbed soil would be reseeded to reduce erosion and weed establishment. The access road and inspection pads would be constructed over previously disturbed soil. Because the improvement area is small, impacts from site improvement would be minor. All disturbed areas would be reseeded with a native seed mix.

4b. Because the site was previously plowed, the Proposed Action would not alter the composition of plant communities at the site. The primary ecological system found in the vicinity of Galata AIS Inspection Station is Great Plains Mixed Grass Prairie, as defined by the Montana Natural Heritage Program (MNHP), and is dominated by western wheatgrass. Common native plant species found near the project site on neighboring State and private land include western wheatgrass, Idaho fescue, Sandberg's bluegrass, green needlegrass, prairie junegrass, needle-and-thread, threadleaf sedge, prickly pear, hairy goldenaster, yellow sweetclover, silky lupine, rosy pussytoes, fringed sagewort, Hood's phlox, and green sagewort.

Common species found on the project site include prickly pear, Russian thistle, kochia, crested wheatgrass, orchardgrass, and Kentucky bluegrass. No noxious weeds were observed on the property at the time of the site visit.

4c. A search of the Montana Natural Heritage Program's (MNHP) Species of Concern database found no vascular or non-vascular plants of significance within the vicinity of the Galata AIS Inspection Station site.

- 4d. Livestock grazing is not allowed on the property and no portion of the property is under agricultural production
- 4e. No noxious weeds were observed on the property at the time of the site visit. In conjunction with the Toole County Weed Department, FWP would implement the Statewide Integrated Weed Management Plan using chemical, biological, and mechanical methods to control weeds on the property. Vehicles would be restricted to the parking areas and access roads, which would be maintained as weed-free. Weed control costs for the Galata AIS Inspection Station in 2017 would be approximately \$1,500, which includes spraying by both FWP and Toole County Weed Department.
- 4f. According to a search of the Natural Resource Conservation Service (NRCS) Web Soil Survey on February 9, 2017, the proposed project site is classified as Farmland of Local Importance, though the site is not under agricultural production. A search of the MNHP Wetland and Riparian Mapping Program on March 6, 2017 and a site visit by FWP staff found that no wetland or riparian vegetation is located on the project site.

5. <u>FISH/WILDLIFE</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Deterioration of critical fish or wildlife habitat?		X				5a.
b. Changes in the diversity or abundance of game animals or bird species?		X				5b.
c. Changes in the diversity or abundance of nongame species?		X				5c.
d. Introduction of new species into an area?		X				
e. Creation of a barrier to the migration or movement of animals?		X				
f. Adverse effects on any unique, rare, threatened, or endangered species?		X				5f.
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		X				
h. For P-R/D-J, will the project be performed in any area in which T&E species are present, and will the project affect any T&E species or their habitat? (Also see 5f.)		X				5h.
i. For P-R/D-J, will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d.)		X				5i.

5a. The proposed developments would have no impact on critical fish or wildlife habitat. The project site does not provide habitat for the threatened red knot, the only federally listed species in Toole County.

5b/5c The proposed project would have no impact on the diversity or abundance of game or non-game wildlife species. Common wildlife species whose habitat distribution overlaps the Galata AIS Inspection Station include pronghorn, mule deer, golden eagle, sharp-tailed

grouse, rough-legged hawk, Swainson's hawk, northern harrier, eastern kingbird, horned lark, western meadowlark, chestnut-collared longspur, McCown's longspur, and various shorebirds. A wide variety of resident and migratory bird species use or travel through the area on a seasonal basis, including a variety of raptors, waterfowl, and songbirds.

Tiber Reservoir is a very popular lake for fishing, boating, and camping and is open to fishing year round. According to recent FWP surveys, the average angler days per year from 2005 to 2013 on Tiber Reservoir were 17,470. The regional ranking averaged the 8<sup>th</sup> most fished body of water and the state ranking averaged the 49<sup>th</sup> most fished body of water in Montana out of more than 1,400 stream reaches, lakes and reservoirs in Montana surveyed annually by FWP. Common game fish found in Tiber Reservoir include walleye, brown trout, rainbow trout, yellow perch, northern pike, catfish, black crappie, and burbot.

- 5f. A search of the MNHP element occurrence database indicates no occurrences of federally ranked, or considered for ranking, animal or plant species have been found within the vicinity of the Proposed Action site. The search indicated that Brewer's sparrow, burrowing owl, chestnut-collared longspur, ferruginous hawk, loggerhead shrike, McCown's longspur, mountain plover, hoary bat, and little brown myotis, Montana Species of Concern, have been observed in or near the Proposed Action site. See *Appendix A* for more information.

The proposed project is unlikely to impact Brewer's sparrow, burrowing owl, chestnut-collared longspur, ferruginous hawk, loggerhead shrike, McCown's longspur, mountain plover, hoary bat, and little brown myotis because the site does not provide habitat that would support these species and the site has been disturbed by agricultural activities, its proximity to Highway 2, and neighboring commercial development.

The Galata AIS Inspection Station site is not currently within the range of the gray wolf. While it is possible for wolves to travel through the project area, none have been recently sighted in the immediate area. The wolf population in Montana is strong and wolves may pass through just about any area including this site. FWP has no concerns with this project impacting gray wolves.

## B. HUMAN ENVIRONMENT

6. <u>NOISE/ELECTRICAL EFFECTS</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Increases in existing noise levels?			X		Yes	6a.
b. Exposure of people to serve or nuisance noise levels?			X		Yes	6b.
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				

- 6a. Construction equipment would cause a temporary, minor increase in noise levels at the proposed inspection site. Any increase in noise level at the improvement site would be short term and minor.
- 6b. The Galata AIS Inspection Station is not located near residential development, with the closest residences located approximately 1/4 mile north of site and only two residences within 1/2 mile. The minor and temporary increase of noise levels during site improvement may disturb nearby visitors. FWP would follow the guidelines of the good neighbor policy, all of which would mitigate increased noise levels and would limit improvement to periods of low visitation to minimize disturbance to others.

7. <u>LAND USE</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				7a.
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?		X				7d.

- 7a. Land use would not change at Galata AIS Inspection Station site so the proposed project would have no impact on the productivity or profitability of the property.
- 7d. Other than impacts on traffic, the Galata AIS Inspection Station would have no other adverse affect on nearby residences.

8. <u>RISK/HEALTH HAZARDS</u>  Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?			X		Yes	8a.
b. Affect an existing emergency response or emergency evacuation plan, or create a need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?			X		Yes Positive	8c.
d. For P-R/D-J, will any chemical toxicants be used? (Also see 8a)			X		Yes	8d.

8a. Physical disturbance of the soil during site improvement could encourage the establishment of additional noxious weeds on the site. In conjunction with the Toole County Weed District, FWP would implement an integrated approach to control noxious weeds, as outlined in the FWP Statewide Integrated Noxious Weed Management Plan. The integrated plan uses a combination of biological, mechanical, and herbicidal treatments to control noxious weeds. The use of herbicides would be in compliance with application guidelines to minimize the risk of chemical spills or water contamination and applied by people trained in safe handling techniques.

There is a minor and temporary risk of fuel or oil from heavy equipment accidentally releasing into the soil during site improvement. Contractors would have on site absorbent materials to minimize any hydrocarbon releases, as well as conduct startup inspection of all hydraulic lines and cylinder seals daily to reduce the potential for a release. FWP would follow FWP BMP during all phases of improvement to minimize risks (*Appendix C*).

8c. Invasive mussels can cause human safety concerns by causing toxic algal blooms and by injuring swimmers and waders with their sharp shells, particularly after the mussel has died. The proposed project would improve public safety by minimizing the risk of invasive mussel establishment in Tiber Reservoir and subsequent spread to other lakes and rivers in Montana.

8d. The use of herbicides to control noxious weeds could result in temporary soil contamination from an inadvertent spill. The use of herbicides would be in compliance with application guidelines, outlined in the FWP Statewide Integrated Noxious Weed Management Plan, to minimize this risk and would be applied by people trained in safe handling techniques.

9. <b>COMMUNITY IMPACT</b>  Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?			X		Yes Positive	9c.
d. Changes in industrial or commercial activity?		X				9d.
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?			X		Yes	9e.

- 9c. The Galata AIS Inspection Station may improve recreational use and tourism of the area by protecting Tiber Reservoir and other lakes and rivers from aquatic invasive species. The control of aquatic invasive species, including zebra and quagga mussels, is critical for maintaining access by visitors seeking Montana's exceptional fishing and water recreation experiences. Protection of Tiber Reservoir and other lakes and rivers would also benefit local retail and service businesses. See *Appendix B - Tourism Report*.
- 9d. There would be no change in commercial use of the site.
- 9e. The Galata AIS Inspection Station could impact traffic on Highway 2 and Galata Road, particularly during weekends and the peak season. Nearby residences and commercial businesses could be impacted by the increased traffic. The Galata AIS Inspection Station has been designed to facilitate safe traffic flow to and from the site and to minimize vehicle congestion on Highway 2 and Galata Road.

The Proposed Action also would not alter the distribution of population in the area.

10. <u>PUBLIC SERVICES/TAXES/UTILITIES</u>  Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		X				10a.
b. Will the proposed action have an effect upon the local or state tax base and revenues?		X				10b.
c. Will the proposed action result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				
d. Will the proposed action result in increased use of any energy source?		X				
e. Define projected revenue sources		X				10e.
f. Define projected maintenance costs.		X				10f.

- 10a. The Proposed Action would have no impact on public services or utilities. A generator powers the decontamination unit so no local power sources are required. Wastewater is heated and sterilized by the decontamination unit and reused. Very little water would be spilled on the site. The decontamination unit will periodically require additional water, which would be available by an onsite cistern or offsite water sources. The Galata AIS Inspection Station would require periodic maintenance by FWP and the site would continue to be patrolled by FWP.
- 10b. The Proposed Action would have no effect on the local and state tax base and revenue because FWP would only lease the site.
- 10e. FWP would offer boat decontamination for no charge so no revenue would be generated from the Galata AIS Inspection Station.
- 10f. Projected annual maintenance, weed control, and personnel expense for management of the site for fiscal year 2017 is estimated to total approximately \$3,000 per year.

11. <b><u>AESTHETICS/RECREATION</u></b>  Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?		X				11a.
b. Alteration of the aesthetic character of a community or neighborhood?		X				11b.
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report.)			X		Yes Positive	11c.
d. For P-R/D-J, will any designated or proposed wild or scenic rivers, trails or wilderness areas be impacted? (Also see 11a, 11c.)		X				11d.

11a/b. The Galata AIS Inspection Station would have no impact on the scenic vistas or aesthetics of Tiber Reservoir or the vicinity of the project site.

11c. The Galata AIS Inspection Station may improve recreational use and tourism of the area by protecting Tiber Reservoir and other lakes and rivers from aquatic invasive species. Protection of Tiber Reservoir and other lakes and rivers would also benefit local retail and service businesses. See *Appendix B - Tourism Report*.

11d. No designated wild or scenic rivers, trails, or wilderness areas would be impacted by the proposed developments.

12. <b><u>CULTURAL/HISTORICAL RESOURCES</u></b>  Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Destruction or alteration of any site, structure or object of prehistoric historic, or paleontological importance?		X				12a.
b. Physical change that would affect unique cultural values?		X				
c. Effects on existing religious or sacred uses of a site or area?		X				
d. For P-R/D-J, will the project affect historic or cultural resources? Attach SHPO letter of clearance. (Also see 12.a.)		X				12d.

12a/d. A file search was completed on the cultural resources at the Galata AIS Inspection Station site in January 2017. FWP concluded that there is a low likelihood of adverse impacts to cultural resources should the project proceed as proposed. The State Historic Preservation Office (SHPO) has been consulted and concurred with FWP recommendations for the project

(Appendix D). If cultural materials are discovered during site improvement, work would cease and SHPO would be contacted for a more in-depth investigation.

## SIGNIFICANCE CRITERIA

13. <u>SUMMARY EVALUATION OF SIGNIFICANCE</u>  Will the proposed action, considered as a whole:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources that create a significant effect when considered together or in total.)		X				
b. Involve potential risks or adverse effects, which are uncertain but extremely hazardous if they were to occur?		X				
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		X				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		X				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		X				
f. For P-R/D-J, is the project expected to have organized opposition or generate substantial public controversy? (Also see 13e.)		X				13f.
g. For P-R/D-J, list any federal or state permits required.		X				13g.

During site improvement of the Galata AIS Inspection Station, there may be minor and temporary impacts to the physical environment, but the impacts would be short-term and the developments would benefit the community and recreational opportunities over the long-term. The Proposed Action would have no negative cumulative effects on the biological, physical, and human environments. When considered over the long-term, the Proposed Action positively impacts the public's recreational use of Tiber Reservoir and other rivers and lakes in Montana.

13f. The proposed project is designed to minimize the spread of invasive species within Tiber Reservoir and other waters of Montana, thereby protecting Montana's water-based recreation and tourism. The Galata AIS Inspection Station is not expected to generate organized opposition or substantial public controversy.

13g. No federal or state permits are required for this project.

### **PART III. NARRATIVE EVALUATION AND COMMENT**

During site improvement of the Galata AIS Inspection Station, there may be minor and temporary impacts to the physical environment, but the impacts would be short-term and the developments would benefit the community and recreational opportunities over the long-term. The Proposed Action would have no negative cumulative effects on the biological, physical, and human environments. When considered over the long-term, the Proposed Action positively impacts the public's recreational use Tiber Reservoir and other rivers and lakes in Montana.

The minor impacts to the environment that were identified in the previous section are small in scale and would not influence the overall environment of the immediate area. The natural environment would continue to provide habitat to transient and permanent wildlife species and would be open to the public for river access. The Proposed Action would not impact local wildlife species that frequent the property and the project would be designed to avoid conditions that stress wildlife populations. The vicinity around the Galata AIS Inspection Station is not considered critical habitat for any fish or wildlife species.

Though Brewer's sparrow, burrowing owl, chestnut-collared longspur, ferruginous hawk, loggerhead shrike, McCown's longspur, mountain plover, hoary bat, and little brown myotis, Montana animal Species of Concern, have been observed in the vicinity of the proposed project site, the proposed project is unlikely to impact these species because the project area is small and the site does not provide habitat for these species.

Soils disturbed during site improvement could colonize with weeds. Disturbed areas would be re-seeded with a native reclamation seed mix to reduce the establishment of weeds. In conjunction with Toole County Weed Control District, FWP would implement the Statewide Integrated Weed Management Plan using chemical, biological and mechanical methods to control weeds on the property.

The proposed Galata AIS Inspection and Decontamination Station would help prevent the spread of zebra and quagga mussels as well as other aquatic invasive species within Tiber Reservoir and other lakes, streams, and rivers in Montana. Control of aquatic invasive species is critical for maintaining the aquatic habitats, native fisheries, and recreational and aesthetic values of Montana's renowned water resources.

### **PART IV. PUBLIC PARTICIPATION**

#### **1. Public involvement:**

The public will be notified in the following manners to comment on the Galata AIS Inspection and Decontamination Station, the Proposed Action and alternatives:

- Two public notices in each of these papers: *the Great Falls Tribune and the Helena Independent Record*.
- Public notice on the Fish, Wildlife & Parks web page: <http://fwp.mt.gov>.
- Draft EA's will be available at the FWP Region 4 Headquarters in Great Falls and the FWP State Headquarters in Helena.
- A news release will be prepared and distributed to a standard list of media outlets interested in FWP issues.
- Copies of this environmental assessment will be distributed to neighboring landowners and interested parties to ensure their knowledge of the Proposed Action.

This level of public notice and participation is appropriate for a project of this scope having limited impacts, many of which can be mitigated.

If requested within the comment period, FWP will schedule and conduct a public meeting on this Proposed Action.

**2. Duration of comment period:**

The public comment period will extend for (15) fifteen days. Written comments will be accepted until 5:00 p.m., April 4, 2017 and can be mailed to the addresses below:

Galata AIS Inspection and Decontamination Station  
Montana Fish, Wildlife & Parks  
PO Box 200701  
Helena, MT 59620  
(406) 444-2535

**PART V. EA PREPARATION**

**1. Based on the significance criteria evaluated in this EA, is an EIS required? NO  
If an EIS is not required, explain why the EA is the appropriate level of analysis for this Proposed Action.**

Based on an evaluation of impacts to the physical and human environment under MEPA, this environmental review revealed no significant negative impacts from the Proposed Action: therefore, an EIS is not necessary and an environmental assessment is the appropriate level of analysis. In determining the significance of the impacts, FWP assessed the severity, duration, geographic extent, and frequency of the impact, the probability that the impact would occur or reasonable assurance that the impact would not occur. FWP assessed the growth-inducing or growth-inhibiting aspects of the impact, the importance to the state and to society of the environmental resource or value effected, any precedent that would be set as a result of an impact of the Proposed Action that would commit FWP to future actions; and potential conflicts with local, federal, or state laws. As this EA revealed no significant impacts from the Proposed Actions, an EA is the appropriate level of review and an EIS is not required.

**2. Person(s) responsible for preparing the EA:**

Eileen Ryce  
FWP Fisheries Division Administrator  
PO Box 200701  
Helena, MT 59620  
[eryce@mt.gov](mailto:eryce@mt.gov)  
(406) 444-2448

Andrea Darling  
FWP EA Contractor  
39 Big Dipper Drive  
Montana City, MT 59634  
[apdarling@gmail.com](mailto:apdarling@gmail.com)

**3. List of agencies or offices consulted during preparation of the EA:**

Montana Department of Commerce – Tourism  
Montana Fish, Wildlife & Parks  
Design and Construction  
Lands Unit  
Legal Unit  
Fisheries Division

Wildlife Division  
Responsive Management Unit  
Montana Natural Heritage Program – Natural Resources Information System (NRIS)  
Montana Department of Natural Resources and Conservation  
Montana State Historic Preservation Office  
U.S. Bureau of Reclamation

#### **APPENDICES**

- A. Environmental Summary Report - Montana Natural Heritage Program
- B. Tourism Report – Department of Commerce
- C. Fish, Wildlife and Parks Best Management Practices
- D. State Historic Preservation Office Concurrence
- E. Aquatic Invasive Species in Montana

# APPENDIX A

## ENVIRONMENTAL SUMMARY REPORT

### MONTANA NATURAL HERITAGE PROGRAM

#### Sensitive Plants and Animals in the Vicinity of Galata AIS Inspection and Decontamination Station

#### **Species of Concern Terms and Definitions**

A search of the Montana Natural Heritage Program (MNHP) element occurrence database (<http://nris.mt.gov>) indicates no occurrences of federally ranked, or considered for ranking, animal or plant species have been found within the vicinity of the Proposed Action site. The search indicated that Brewer's sparrow, burrowing owl, chestnut-collared longspur, ferruginous hawk, loggerhead shrike, McCown's longspur, mountain plover, hoary bat, and little brown myotis, Montana animal Species of Concern, have been observed in or near the Proposed Action site. More information on these species is included below.

**Montana Species of Concern.** The term “Species of Concern” includes taxa that are at-risk or potentially at-risk due to rarity, restricted distribution, habitat loss, and/or other factors. The term also encompasses species that have a special designation by organizations or land management agencies in Montana, including: Bureau of Land Management Special Status and Watch species; U.S. Forest Service Sensitive and Watch species; U.S. Fish and Wildlife Service Threatened, Endangered and Candidate species.

#### **Status Ranks (Global and State)**

The international network of Natural Heritage Programs employs a standardized ranking system to denote global (**G** -- range-wide) and state status (**S**) (Nature Serve 2003). Species are assigned numeric ranks ranging from 1 (critically imperiled) to 5 (demonstrably secure), reflecting the relative degree to which they are “at-risk”. Rank definitions are given below. A number of factors are considered in assigning ranks -- the number, size and distribution of known “occurrences” or populations, population trends (if known), habitat sensitivity, and threat. Factors in a species’ life history that make it especially vulnerable are also considered (e.g., dependence on a specific Pollinator).

#### **U.S. Fish and Wildlife Service (Endangered Species Act)- Terms and Definitions**

**LE. Listed endangered:** Any species in danger of extinction throughout all or a significant portion of its range.

**LT. Listed threatened:** Any species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

**C. Candidate:** Those taxa for which sufficient information on biological status and threats exists to propose to list them as threatened or endangered.

**DM. Recovered, delisted, and being monitored** - Any previously listed species that is now recovered, has been delisted, and is being monitored.

**BGEPA. The Bald and Golden Eagle Protection Act of 1940 (BGEPA)** prohibits anyone, without a permit issued by the Secretary of the Interior, from taking bald or golden eagles, including their parts, nests, or eggs. The BGEPA provides criminal and civil penalties for persons who take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any

time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof.

**MBTA. The Migratory Bird Treaty Act (MBTA)** implements four treaties that provide for international protection of migratory birds. The statute's language is clear that actions resulting in a "taking" or possession (permanent or temporary) of a protected species is a violation of the MBTA.

**BCC. Birds of Conservation Concern 2008.** The 1988 amendment to the Fish and Wildlife Conservation Act mandates the U.S. Fish and Wildlife Service to identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act

Status Ranks	
Code	Definition
<b>G1</b> <b>S1</b>	At high risk because of extremely limited and/or rapidly declining numbers, range, and/or habitat, making it highly vulnerable to global extinction or extirpation in the state.
<b>G2</b> <b>S2</b>	At risk because of very limited and/or declining numbers, range, and/or habitat, making it vulnerable to global extinction or extirpation in the state.
<b>G3</b> <b>S3</b>	Potentially at risk because of limited and/or declining numbers, range, and/or habitat, even though it may be abundant in some areas.
<b>G4</b> <b>S4</b>	Uncommon but not rare (although it may be rare in parts of its range), and usually widespread. Apparently not vulnerable in most of its range, but possibly cause for long-term concern.
<b>G5</b> <b>S5</b>	Common, widespread, and abundant (although it may be rare in parts of its range). Not vulnerable in most of its range.

**MFWP Conservation Need.** Under Montana's Comprehensive Fish and Wildlife Conservation Strategy of 2005, individual animal species are assigned levels of conservation need as follows:

- Tier I.** Greatest conservation need. Montana FWP has a clear obligation to use its resources to implement conservation actions that provide direct benefit to these species, communities and focus areas.
- Tier II.** Moderate conservation need. Montana FWP could use its resources to implement conservation actions that provide direct benefit to these species communities and focus areas.
- Tier III.** Lower conservation need. Although important to Montana's wildlife diversity, these species, communities and focus areas are either abundant or widespread or are believed to have adequate conservation already in place.
- Tier IV.** Species that are non-native, incidental or on the periphery of their range and are either expanding or very common in adjacent states.

## SENSITIVE PLANTS AND ANIMALS IN THE VICINITY OF

## GALATA AIS INSPECTION AND DECONTAMINATION STATION

### 1. *Spizella breweri* (Brewer's Sparrow)

*Vertebrate animal- Bird*

*Habitat -Sagebrush*

Natural Heritage Ranks

Federal Agency Status:

State: **S3B**

U.S. Fish and Wildlife Service: **MBTA; BCC 10; BCC17**

Global: **G5**

U.S. Forest Service:

U.S. Bureau of Land Management: **Sensitive**

Element Occurrence data was reported of Brewer's sparrow within one mile of the project area. The last recorded observation date was 1997.

### 2. *Athene cunicularia* (Burrowing Owl)

*Vertebrate animal- Bird*

*Habitat -Grasslands*

Natural Heritage Ranks

Federal Agency Status:

State: **S3B**

U.S. Fish and Wildlife Service:

Global: **G4**

U.S. Forest Service: **Sensitive**

U.S. Bureau of Land Management: **Sensitive**

Element Occurrence data was reported of burrowing owl within one mile of the project area. The last recorded observation date was 2011.

### 3. *Calcarius omatus* (Chestnut-collared Longspur)

*Vertebrate animal- Bird*

*Habitat- Grasslands*

Natural Heritage Ranks

Federal Agency Status:

State: **S2B**

U.S. Fish and Wildlife Service: **MBTA; BCC 11; BCC17**

Global: **G5**

U.S. Forest Service:

U.S. Bureau of Land Management: **Sensitive**

Element Occurrence data was reported of chestnut-collared longspur within 1 mile of the project area. The last recorded observation date was 2009.

### 4. *Buteo regalis* (Ferruginous Hawk)

*Vertebrate animal- Bird*

*Habitat- Sagebrush Grasslands*

Natural Heritage Ranks

Federal Agency Status:

State: **S3B**

U.S. Fish and Wildlife Service: **MBTA; BCC 10; BCC17**

Global: **G4**

U.S. Forest Service:

U.S. Bureau of Land Management: **Sensitive**

Element Occurrence data was reported of ferruginous hawk within 2 miles of the project area. The last recorded observation date was 2009.

### 5. *Lanius ludovicianus* (Loggerhead Shrike)

*Vertebrate animal- Bird*

*Habitat- Shrubland*

Natural Heritage Ranks

Federal Agency Status:

State: **S3B**

U.S. Fish and Wildlife Service: **MBTA; BCC 10; BCC17**

Global: **G4**

U.S. Forest Service:

U.S. Bureau of Land Management: **Sensitive**

Element Occurrence data was reported of loggerhead shrike within 2 miles of the project area. The last recorded observation date was 1997.

**6. *Phynchophanes mccownii* (McCown's Longspur)**

*Vertebrate animal- Bird*

*Habitat- Grasslands*

Natural Heritage Ranks

Federal Agency Status:

State: **S3B**

U.S. Fish and Wildlife Service: **MBTA; BCC 10; BCC 11; BCC17**

Global: **G4**

U.S. Forest Service:

U.S. Bureau of Land Management: **Sensitive**

Element Occurrence data was reported of McCown's longspur within 2 miles of the project area. The last recorded observation date was 1997.

**7. *Charadrius montanus* (Mountain Plover)**

*Vertebrate animal- Bird*

*Habitat- Grasslands*

Natural Heritage Ranks

Federal Agency Status:

State: **S2B**

U.S. Fish and Wildlife Service: **MBTA; BCC 11; BCC17**

Global: **G3**

U.S. Forest Service:

U.S. Bureau of Land Management: **Sensitive**

Element Occurrence data was reported of mountain plover within 2 miles of the project area. The last recorded observation date was 1997.

**8. *Myotis lucifugus* (Little Brown Myotis)**

Natural Heritage Ranks

Federal Agency Status:

State: **S3**

U.S. Fish and Wildlife Service:

Global: **G3**

U.S. Forest Service:

U.S. Bureau of Land Management:

Element Occurrence data was reported of little brown myotis within the project area. The last recorded observation date was 2009.

**9. *Lasiurus cinereus* (Hoary Bat)**

*Vertebrate animal- Mammal*

*Habitat- Riparian and Forests*

Natural Heritage Ranks

Federal Agency Status:

State: **S3**

U.S. Fish and Wildlife Service:

Global: **G3G5**

U.S. Forest Service:

U.S. Bureau of Land Management:

Element Occurrence data was reported of hoary bat within the project area. The last recorded observation date was 2008.

## **APPENDIX B TOURISM REPORT**

### **MONTANA ENVIRONMENTAL POLICY ACT (MEPA) & MCA 23-1-110**

The Montana Department of Fish, Wildlife and Parks has initiated the review process as mandated by MCA 23-1-110 and the Montana Environmental Policy Act in its consideration of the project described below. As part of the review process, input and comments are being solicited. Please complete the project name and project description portions and submit this form to:

Jan Stoddard, Visitor Services Manager  
Montana Office of Tourism and Business Development  
Department of Commerce  
301 S. Park Ave.  
Helena, MT 59601

**Project Name:** Galata AIS Inspection and Decontamination Station

**Project Description:** Montana Fish, Wildlife & Parks (FWP) proposes to lease approximately 1 acre of private land at the intersection of Highway 2 and Galata Road north of Tiber Reservoir at Galata, Montana to establish a seasonal aquatic invasive species (AIS) inspection and decontamination station. Proposed developments include expansion of an existing gravel access road, a gravel inspection pad; decontamination unit; access to a well; water delivery system to the decontamination unit; portable latrine; canopy shelter, and a storage shipping container.

1. Would this site development project have an impact on the tourism economy?  
NO YES If YES, briefly describe:

Yes, as described, this project has the potential to positively impact the tourism and recreation industry economy if properly maintained. Tiber Reservoir is one of the most versatile recreation areas in Montana offering a year-round fishery, water recreation sports, birding, and wildlife watching. Control of aquatic invasive species is critical for maintaining access by visitors looking for fishing and water recreation experiences.

A recent study by the Institute for Tourism & Recreation Research (ITRR) examined the economic impact of the Yellowstone River closure beginning August 19<sup>th</sup>, 2016. ITTR estimated that the economic output of Park County was reduced between \$360,000 to \$524,000 including a 5% decrease in Livingston bed tax collections during 3<sup>rd</sup> quarter. The study also found that if public lands or waters were not accessible to tourism businesses, 85% of businesses would be negatively/very negatively affected, 25% would be out of business, and 47% would have their business severely reduced. Monitoring and treating seasonal aquatic invasive species is essential for sustaining Montana's incredible water

assets.

2. Does this impending improvement alter the quality or quantity of recreation/tourism opportunities and settings?

NO

**YES**

If YES, briefly describe:

Yes, as described, this project has the potential to positively impact the tourism and recreation industry economy if properly maintained. We are assuming the agency has determined it has necessary funding for the on-going operations and maintenance once this project is completed

Signature Jan Stoddard, MOTBD SCS Bureau Chief Date 2/27/2017

**APPENDIX C**  
**MONTANA FISH, WILDLIFE AND PARKS**  
**BEST MANAGEMENT PRACTICES**

10-02-02

Updated May 1, 2008

**I. ROADS**

**A. Road Planning and location**

1. Minimize the number of roads constructed at the FAS through comprehensive road planning, recognizing foreseeable future uses.
  - a. Use existing roads, unless use of such roads would cause or aggravate an erosion problem.
2. Fit the road to the topography by locating roads on natural benches and following natural contours. Avoid long, steep road grades and narrow canyons.
3. Locate roads on stable geology, including well-drained soils and rock formations that tend to dip into the slope. Avoid slumps and slide-prone areas characterized by steep slopes, highly weathered bedrock, clay beds, concave slopes, hummocky topography, and rock layers that dip parallel to the slope. Avoid wet areas, including seeps, wetlands, wet meadows, and natural drainage channels.
4. Minimize the number of stream crossings.
  - a. Choose stable stream crossing sites. "Stable" refers to streambanks with erosion-resistant materials and in hydrologically safe spots.

**B. Road Design**

1. Design roads to the minimum standard necessary to accommodate anticipated use and equipment. The need for higher engineering standards can be alleviated through proper road-use management. "Standard" refers to road width.
2. Design roads to minimize disruption of natural drainage patterns. Vary road grades to reduce concentrated flow in road drainage ditches, culverts, and on fill slopes and road surfaces.

**C. Drainage from Road Surface**

1. Provide adequate drainage from the surface of all permanent and temporary roads. Use outsloped, insloped or crowned roads, installing proper drainage features. Space road drainage features so peak flow on road surface or in ditches will not exceed their capacity.
  - a. Outsloped roads provide means of dispersing water in a low-energy flow from the road surface. Outsloped roads are appropriate when fill slopes are stable, drainage will not flow directly into stream channels, and transportation safety can be met.
  - b. For insloped roads, plan ditch gradients steep enough, generally greater than 2%, but less than 8%, to prevent sediment deposition and ditch erosion. The steeper gradients may be suitable for more stable soils; use the lower gradients for less stable soils.

- c. Design and install road surface drainage features at adequate spacing to control erosion; steeper gradients require more frequent drainage features. Properly constructed drain dips can be an economical method of road surface drainage. Construct drain dips deep enough into the sub-grade so that traffic will not obliterate them.
  2. For ditch relief/culverts, construct stable catch basins at stable angles. Protect the inflow end of cross-drain culverts from plugging and armor if in erodible soil. Skewing ditch relief culverts 20 to 30 degrees toward the inflow from the ditch will improve inlet efficiency.
  3. Provide energy dissipators (rock piles, slash, log chunks, etc.) where necessary to reduce erosion at outlet of drainage features. Cross-drains, culverts, water bars, dips, and other drainage structures should not discharge onto erodible soils or fill slopes without outfall protection.
  4. Route road drainage through adequate filtration zones, or other sediment-settling structures. Install road drainage features above stream crossings to route discharge into filtration zones before entering a stream.
- D. Construction/Reconstruction
1. Stabilize erodible, exposed soils by seeding, compacting, riprapping, benching, mulching, or other suitable means.
  2. At the toe of potentially erodible fill slopes, particularly near stream channels, pile slash in a row parallel to the road to trap sediment. When done concurrently with road construction, this is one method to effectively control sediment movement and it also provides an economical way of disposing of roadway slash. Limit the height, width and length of these "slash filter windrows" so not to impede wildlife movement. Sediment fabric fences or other methods may be used if effective.
  3. Construct cut and fill slopes at stable angles to prevent sloughing and subsequent erosion.
  4. Avoid incorporating potentially unstable woody debris in the fill portion of the road prism. Where possible, leave existing rooted trees or shrubs at the toe of the fill slope to stabilize the fill.
  5. Place debris, overburden, and other waste materials associated with construction and maintenance activities in a location to avoid entry into streams. Include these waste areas in soil stabilization planning for the road.
  6. When using existing roads, reconstruct only to the extent necessary to provide adequate drainage and safety; avoid disturbing stable road surfaces. Consider abandoning existing roads when their use would aggravate erosion.
- E. Road Maintenance
1. Grade road surfaces only as often as necessary to maintain a stable running surface and to retain the original surface drainage.
  2. Maintain erosion control features through periodic inspection and maintenance, including cleaning dips and cross-drains, repairing ditches, marking culvert inlets to aid in location, and clearing debris from culverts.
  3. Avoid cutting the toe of cut slopes when grading roads, pulling ditches, or

plowing snow.

4. Avoid using roads during wet periods if such use would likely damage the road drainage features. Consider gates, barricades or signs to limit use of roads during wet periods.

## II. RECREATIONAL FACILITIES (parking areas, campsites, trails, ramps, restrooms)

### A. Site Design

1. Design a site that best fits the topography, soil type, and stream character, while minimizing soil disturbance and economically accomplishing recreational objectives. Keep roads and parking lots at least 50 feet from water; if closer, mitigate with vegetative buffers as necessary.
2. Locate foot trails to avoid concentrating runoff and provide breaks in grade as needed. Locate trails and parking areas away from natural drainage systems and divert runoff to stable areas. Limit the grade of trails on unstable, saturated, highly erosive, or easily compacted soils
3. Scale the number of boat ramps, campsites, parking areas, bathroom facilities, etc. to be commensurate with existing and anticipated needs. Facilities should not invite such use that natural features will be degraded.
4. Provide adequate barriers to minimize off-road vehicle use

### B. Maintenance: Soil Disturbance and Drainage

1. Maintenance operations minimize soil disturbance around parking lots, swimming areas and campsites, through proper placement and dispersal of such facilities or by reseeding disturbed ground. Drainage from such facilities should be promoted through proper grading.
2. Maintain adequate drainage for ramps by keeping side drains functional or by maintaining drainage of road surface above ramps or by crowning (on natural surfaces).
3. Maintain adequate drainage for trails. Use mitigating measures, such as water bars, wood chips, and grass seeding, to reduce erosion on trails.
4. When roads are abandoned during reconstruction or to implement site-control, they must be reseeded and provided with adequate drainage so that periodic maintenance is not required.

## III. RAMPS AND STREAM CROSSINGS

### A. Legal Requirements

1. Relevant permits must be obtained prior to building bridges across streams or boat ramps. Such permits include the SPA 124 permit, the COE 404 permit, and the DNRC Floodplain Development Permit.

### B. Design Considerations

1. Placement of boat ramp should be such that boats can load and unload with out difficulty and the notch in the bank where the ramp was placed does not encourage bank erosion. Extensions of boat ramps beyond the natural bank can also encourage erosion.

2. Adjust the road grade or provide drainage features (e.g. rubber flaps) to reduce the concentration of road drainage to stream crossings and boat ramps. Direct drainage flow through an adequate filtration zone and away from the ramp or crossing through the use of gravel side-drains, crowning (on natural surfaces) or 30-degree angled grooves on concrete ramps.
3. Avoid unimproved stream crossings on permanent streams. On ephemeral streams, when a culvert or bridge is not feasible, locate drive-throughs on a stable, rocky portion of the stream channel.
4. Unimproved (non-concrete) ramps should only be used when the native soils are sufficiently gravelly or rocky to withstand the use at the site and to resist erosion.

C. Installation of Stream Crossings and Ramps

1. Minimize stream channel disturbances and related sediment problems during construction of road and installation of stream crossing structures. Do not place erodible material into stream channels. Remove stockpiled material from high water zones. Locate temporary construction bypass roads in locations where the stream course will have a minimal disturbance. Time the construction activities to protect fisheries and water quality.
2. Where ramps enter the stream channel, they should follow the natural streambed in order to avoid changing stream hydraulics and to optimize use of boat trailers.
3. Use culverts with a minimum diameter of 15 inches for permanent stream crossings and cross drains. Proper sizing of culverts may dictate a larger pipe and should be based on a 50-year flow recurrence interval. Install culverts to conform to the natural streambed and slope on all perennial streams and on intermittent streams that support fish or that provide seasonal fish passage. Place culverts slightly below normal stream grade to avoid culvert outfall barriers. Do not alter stream channels upstream from culverts, unless necessary to protect fill or to prevent culvert blockage. Armor the inlet and/or outlet with rock or other suitable material where needed.
4. Prevent erosion of boat ramps and the affected streambank through proper placement (so as to not catch the stream current) and hardening (riprap or erosion resistant woody vegetation).
5. Maintain a 1-foot minimum cover for culverts 18-36 inches in diameter, and a cover of one-third diameter for larger culverts to prevent crushing by traffic.

**APPENDIX D**  
**STATE HISTORIC PRESERVATION OFFICE CONCURRENCE**

**From:** Murdo, Damon  
**Sent:** Tuesday, February 28, 2017 10:36 AM  
**To:** Mangum, Bardell <[bmangum@mt.gov](mailto:bmangum@mt.gov)>  
**Subject:** AQUATIC INVASIVE SPECIES DECONTAMINATION STATIONS,  
BROADWATER AND TOOLE COUNTIES

February 28, 2017

Bardell Mangum  
MT FWP  
PO Box 200701  
Helena MT 59620-0701

RE: AQUATIC INVASIVE SPECIES DECONTAMINATION STATIONS, BROADWATER  
AND TOOLE COUNTIES. SHPO Project #: 2017022706

Dear Mr. Mangum:

I have conducted a cultural resource file search for the above-cited project located in Section 27, T8N R1E, and Section 9, T31N R3E. According to our records there have been a few previously recorded sites within the designated search locales. In addition to the sites there have been a few previously conducted cultural resource inventories done in the areas. I've attached a list of these sites and reports. If you would like any further information regarding these sites or reports, you may contact me at the number listed below.

It is SHPO's position that any structure over fifty years of age is considered historic and is potentially eligible for listing on the National Register of Historic Places. If any structures are to be altered and are over fifty years old, we would recommend that they be recorded and a determination of their eligibility be made.

As long as there will be no disturbance or alteration to structures over fifty years of age we feel that there is a low likelihood cultural properties will be impacted. We, therefore, feel that a recommendation for a cultural resource inventory is unwarranted at this time. However, should structures need to be altered or if cultural materials be inadvertently discovered during this project we would ask that our office be contacted and the site investigated.

If you have any further questions or comments, you may contact me at (406) 444-7767 or by e-mail at [dmurdo@mt.gov](mailto:dmurdo@mt.gov). I have attached an invoice for the file search. Thank you for consulting with us.

Sincerely,

Damon Murdo  
Cultural Records Manager  
State Historic Preservation Office

File: FWP/FISH/2017

## **APPENDIX E**

### **AQUATIC INVASIVE SPECIES IN MONTANA**

Aquatic invasive species (AIS) are non-indigenous plant, animal, or microbe species that threaten the diversity or abundance of native species, the ecological stability of aquatic ecosystems, or commercial, agricultural, aquacultural, or recreational activities. When non-native species are introduced into new habitats they often grow, reproduce, and spread rapidly due to the absence of natural predators and other controls. Once established, they are often impossible to eradicate and they can consume or displace native species, clog waterways, impact municipal and agricultural systems, degrade ecosystems, threaten recreational and commercial fisheries, ruin recreational opportunities, and cause public health problems.

Montana, with over 177,000 stream miles and over 10,000 lakes, ponds and reservoirs, has a large stake in the prevention and control of AIS. Besides supporting agricultural and resource-extraction industries throughout the state, Montana's waters provide recreational opportunities for local and state residents and are the basis of a critically important tourist economy that draws visitors from every corner of the globe. Recreational tourism is often the major and sometimes the only business in many parts of Montana.

Additionally, Montana contains the headwaters of three major rivers—the St. Mary's, Columbia, and Mississippi. This unique position means that any AIS that are introduced into a Montana river may be spread to downstream states. While many AIS can and do travel upstream, Montana's status as a headwater state puts additional responsibility on Montana to do all it can to combat the introduction and spread of AIS.

Nationally, there are currently hundreds of AIS that have already become established in the United States and represent a threat to the nation's aquatic resources. As the introduction and spread of AIS continues, the problems associated with these introduced species intensify and create a wide variety of ecological and socio-economic problems. While many AIS are present in Montana, some of the most potentially damaging ones are thus far undetected in the state. However, Montana waters are currently affected by one species of pathogen (*Myxobolus cerebralis*), the parasite that causes whirling disease; one species of fungus (chytrid); six species of invasive aquatic plants (Eurasian water milfoil, curly-leaf pondweed, flowering rush, purple loosestrife, salt cedar, and yellow flag iris), one species of mollusk (New Zealand mudsnail) and one species of amphibian (bullfrog). The establishment of these invasive species was made possible through several pathways for introduction, including but not limited to recreational boats and other equipment, live fish culture, and natural dispersal.

Management of AIS within Montana is shared between the following four state agencies: Fish, Wildlife & Parks (FWP); Department of Natural Resources and Conservation;

Department of Agriculture; and Department of Transportation; with FWP being the lead. Together, those agencies work to minimize the harmful ecological, economic, and social impacts of AIS through prevention and management of introductions, population growth, and dispersal of AIS into, within, and from Montana. The following points guide the management of AIS by the State of Montana.

1. There are many pathways for introduction and spread of AIS, most of which are human-caused, both accidental and intentional. New species continue to be introduced and spread within North America through these pathways.
2. Introductions have many costs associated with them, including control and management, lasting changes to ecosystems, loss of recreational opportunities, economic burdens on state, regional, and municipal entities to address AIS, and direct costs to private industries and consumers.
3. Often there are few, if any, acceptable controls available for use in natural water bodies once AIS become established.
4. Once species are introduced and become successfully established, control efforts will be very costly and total eradication unlikely.
5. Prevention is the best course of action against invasive species. Management plans, education programs, and regulations are strategies that can help in the fight against AIS.